completely recompiling the code with the changes. Further, conventional systems do not allow parametric changes on the fly during runtime of an application without stopping the application and/or needing to recompile the application code. For the above reasons, there is a need for a system and method for customizing an image

5   processing platform, which supports the ability to be dynamically defined during run time of the image processing operations.

SUMMARY OF THE INVENTION

The invention relates to a architecture for a customizable image

10   processing platform. In one embodiment of the invention, a system for assembling an application for processing image or image-derived data includes a base operator configured to interface with one or more derivative operator classes, each operator class including an operator object for executing a processing function on the image or image-derived data. The system according to the embodiment further includes a base

15   multiport node class configured to provide a multiport node object for each operator object. The multiport node objects instantiate a pluggable operator for connecting the multiport node objects together at runtime according to user-defined parameters, and wherein the connection of multiport node objects implements the processing functions of the operator objects to execute the application.

20   In accordance with another embodiment, a method of assembling an application for processing image or image-derived data includes providing a base operator having an interface for interacting with one or more derivative operator classes, each operator class including an operator object for executing an processing function on the image or image-derived data. The method further includes providing a

25   base multiport node configured to provide a multiport node for each interacting operator object, and connecting the multiport nodes with a pluggable operator instantiated by the multiport nodes.

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